

Title (en)
PLASMA PROCESSED SINTERABLE CERAMICS

Publication
EP 0107428 A3 19870805 (EN)

Application
EP 83306081 A 19831007

Priority
US 43438582 A 19821014

Abstract (en)
[origin: EP0107428A2] Highly pure and dense sintered ceramics are produced by passing ceramic precursors through a radio frequency plasma torch (11), and reacting these precursors to produce a powder which is subsequently sintered to desirable shape and size. The powder is very reactive, fine, pure, spherical, free of agglomeration and has a narrow size distribution. These properties are ideal for producing highly-dense, high-strength ceramics, and at substantially lower temperatures than the melting or decomposition points of these materials. Ceramic bodies made in this way can be shaped into a wide variety of forms.

IPC 1-7
C04B 35/64; **C03B 37/025**; **C03B 19/00**; **B28B 1/32**; **C23C 16/50**

IPC 8 full level
C03B 19/06 (2006.01); **C03B 19/10** (2006.01); **C03B 19/14** (2006.01); **C03B 37/014** (2006.01); **C03C 1/02** (2006.01); **C04B 35/584** (2006.01); **C04B 35/622** (2006.01); **C04B 35/64** (2006.01)

CPC (source: EP)
C03B 19/06 (2013.01); **C03B 19/106** (2013.01); **C03B 19/1423** (2013.01); **C03B 19/1446** (2013.01); **C03B 19/1453** (2013.01); **C03B 37/014** (2013.01); **C03B 37/01426** (2013.01); **C04B 35/584** (2013.01); **C04B 35/64** (2013.01)

Citation (search report)
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• [Y] DE 1521553 A1 19690724 - ITT IND GMBH DEUTSCHE
• [Y] US 4123316 A 19781031 - TSUCHIMOTO TAKASHI
• [A] EP 0046059 A2 19820217 - FUJITSU LTD [JP]
• [XP] CHEMICAL ABSTRACTS, vol. 98, no. 16, 18th April 1983, page 302, abstract no. 131237d, Columbus, Ohio, US; & JP-A-57 183 369 (SUMITOMO ELECTRIC INDUSTRIES LTD.) 11-11-1982

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Designated contracting state (EPC)
DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0107428 A2 19840502; **EP 0107428 A3 19870805**; AU 2016483 A 19840419; CA 1208162 A 19860722; JP S59131564 A 19840728; ZA 837492 B 19840926

DOCDB simple family (application)
EP 83306081 A 19831007; AU 2016483 A 19831013; CA 438326 A 19831004; JP 19226483 A 19831014; ZA 837492 A 19831006